

REMARKS

Amendments to the Specification

The specification has been amended herein to update the Related Applications paragraph and to reference the various parts of Figures 1-26. No new matter has been added.

Claim Amendments

Claim 20 has been amended herein. Claims 39 and 40 have been canceled herein. New Claim 41 has been added herein. Support for these amendments can be found throughout the specification as originally filed and at page 18, lines 3-9. No new matter has been added.

Rejection of Claims 20-21 and 39-40 under 35 U.S.C. §112, Second Paragraph

Claims 20-21 and 39-40 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Specifically, the Office Action states that because the oligonucleotide includes a 3'-3' linker it is not clear how such an oligonucleotide can be complementary to a gene of HIV-1.

Applicants respectfully disagree. However, without conceding to the correctness of the Examiner's position but in order to expedite prosecution of the instant application, Applicant has amended the proviso to clearly recite that when the immunostimulatory dinucleotide is CpG neither sequence on the left nor right side of the 3'-3' linker would be complementary to the *gag* or *tat* gene of HIV-1. The Applicant submits that the Examiner's rejection is rendered moot by the amendment. Reconsideration and withdrawal of the rejection is respectfully requested.

Rejection of Claims 20-21 under 35 U.S.C. §103(a)

Claims 20-21 are rejected under 35 U.S.C. §103(a) as being unpatentable over Chaix et al and US Patent 6,562,798 (hereinafter "Schwartz").

Applicants respectfully disagree. Chaix does not disclose the claim invention because Chaix fails to teach or suggest an immunostimulatory oligonucleotide compound comprising an immunostimulatory dinucleotide of formula CpG wherein C is a non-natural pyrimidine nucleoside and G is a natural or non-natural purine nucleoside or wherein C is a natural pyrimidine nucleoside and G is a non-natural purine nucleoside.

Schwartz fails to provide that which Chaix lacks. Schwartz et al. exclusively describes immunostimulatory sequences in which the C residue of a CG dinucleotide is modified by addition to C-5 and/or C-6 of an electron withdrawing (hydrogen bond acceptor) group. In fact, Schwartz et al. specifically defines "modified ISS" in this manner. Schwartz provides no teaching or suggestion to further modify the oligonucleotide with an immunostimulatory moiety. Therefore, Schwartz fails to teach the claimed invention.

One of ordinary skill in the art would have had no motivation to combine the descriptions in Chaix and Schwartz to arrive at the immunostimulatory oligonucleotide compounds of the instant claims with any reasonable expectation of success. Therefore, the instant claims are nonobvious over Chaix and Schwartz. Reconsideration and withdrawal of the rejection are respectfully requested.

Double Patenting

Claims 20-21 and 39-40 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over various claims of copending U.S. Application Nos. 11/174,448; 11/234,074; 11/234,075; 11/174,002; 11/173,983; 11/173,794; 11/174,282; 11/173,938; 11/174,450; and 10/757,345.

As stated by the Examiner, this is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented. Please note that U.S. Application Nos. 11/174,448; 11/234,074; 11/234,075; 11/174,002; 11/173,983; 11/173,794; 11/174,282; 11/173,938; 11/174,450 and 10/757,345 are the later filed applications.

Therefore, if this provisional double patenting rejection is the only remaining rejection in the application, Applicants request that the Examiner withdraw the rejection in the instant [earlier filed] application thereby permitting this application to issue without need of a terminal disclaimer. (See MPEP §804(I)(B)). Applicants will then consider filing a Terminal Disclaimer or take any other action deemed necessary in the later filed, copending application.

Claims 20-21 and 39-40 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over various claims of copending U.S. Application No. 10/279,684 (now US Patent 7,276,489).

Please note that U.S. Application No. 10/279,684 is the later filed application. Therefore, if this double patenting rejection is the only remaining rejection in the application, Applicants request that the Examiner withdraw the rejection in the instant [earlier filed] application thereby permitting this application to issue without need of a terminal disclaimer. (See MPEP §804(I)(B)).

Claims 20-21 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over various claims of copending U.S. Application No. 11/270,805.

As stated by the Examiner, this is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented. If this provisional double patenting rejection is the only remaining rejection in the application, Applicants request that the Examiner withdraw the rejection and allow the application to issue as a patent (See MPEP §804(I)(B)). Applicants will then consider filing a Terminal Disclaimer or take any other action deemed necessary in the later filed copending application.

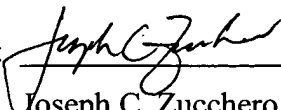
CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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